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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,430	04/25/2006	Simon Cote	1032256-000033	6929
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EXAMINER				
KAHN, RACHEL				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
01/20/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary

Application No.

10/567,430

Applicant(s)

COTE, SIMON

Examiner

RACHEL KAHN

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 53-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 53-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/22)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

Claims 53-66 are pending as filed on 12/23/09.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/23/09 has been entered.

Applicant's amendment filed 12/23/09 overcomes the following objections and rejections set forth in the action dated 8/25/09:

The objection to claims 54 and 62 are withdrawn in view of applicant's amendment correcting the typographical error.

The rejections of claims 55, 57, 58, 63, 65 and 66 under 35 USC 112 are withdrawn in view of Applicant's amendments defining "n," and changing "alkyl acrylate" to "ethyl formate."

Examiner notes that the cross-linked polyethers obtained from the monomers recited in claims 58 and 66 were indicated allowable in the previous action, dated

8/25/09. Upon reconsideration, these polyethers are not deemed patentable in view of the teachings of Kunita (US 6476092). Please see the rejection below.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 53-66 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 53, 56, 61 and 64 recite C₁-C₃₀ aryls and C₂-C₃₀ aralkyls. There are no aryl groups with just 1 carbon atom, and no aralkyl groups with just 2 carbon atoms. Appropriate correction is required.

Claims 53 and 61 (as well as all claims dependent therefrom) are further rejected as indefinite due to the amendment to the independent claims reciting that "groups C, D, and E remain respectfully unchanged in every monomer polymerized." Before consideration of Applicant's remarks filed 12/23/09, Examiner interpreted the amendment to indicate that groups C, D and E are not reactive in the polymerization, and therefore are not chemically altered at any point during the polymerization. However, Applicant argues that, according to the amendment, the C, D, and E groups "are the same in every monomer of the general formula in claim 53... that is polymerized in the cross-linked polymer." Examiner finds this statement confusing. It appears to mean that all monomers which meet the general formula in claim 53 must be

identical. Examiner notes that the claim language is not limited in this way. Applicant further argues (on p 5 of remarks) that the amendment clearly indicates that the monomers of the crosslinked polyether are of one type. The claim language is not limited in this way.

Given the discrepancy between what the Examiner feels is the most reasonable interpretation of the amendment, and the way in which Applicant has interpreted the amendment in the remarks, the amended claims are deemed to be indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 53-66 are rejected under 35 U.S.C. 102(b) as being anticipated by **Kunita** (US 6476092).

Kunita discloses a photopolymerizable material comprising a compound and an initiator (see col 2, lines 33-49). Compounds D-3 and D-4, disclosed in cols 29-30, table 4, anticipate the instantly recited monomers. Kunita teaches that the compounds may be used alone or as a mixture (col 59, lines 30-37; col 61, lines 6-13). The instantly recited cross-linked polyether is obtained once the monomer composition is exposed to

radiation, as disclosed in columns 133-134. See specifically col 133, line 63 to col 134, line 46.

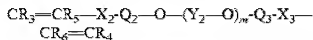
Claim 59 and 60 contain product by process limitations. Kunita discloses a monomer that appears to be the same as the product set forth in a product-by-process claim, although it may have been produced by a different process. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. See MPEP 2113.

Claims 53-57, 59, and 61-65 are rejected under 35 U.S.C. 102(b) as being anticipated by **Cote** (WO02/40559). The US Patent version, US 7235297, will be cited in this office action.

Cote discloses a crosslinked polyether which is obtained by copolymerization of at least one monomer with a crosslinker having two polymerizable terminal end groups (col 4, lines 30-35).

The following formula, disclosed by Cote in column 4, line 58 to col 5, line 10, fulfills the recitations of instant claims 53-57, 59, and 61-65:

The cross-linker preferably comprises a PEG or PPG based polymer. For example, it may be a secondary cross-linker of the general formula



Cote discloses that the crosslinker is PEG or PPG based, fulfilling the instant recitations for "D" (col 4, lines 58-60). X_2 , Q_2 , X_3 and Q_3 may be nothing or alkyl (col 5, lines 3-8). R_3 and R_4 may be "H, H" (col 4, lines 65-67). R_5 and R_6 may be alkyl or aryl. "m" is 0-2000. It is the examiner's position that the generic formula in Cote is sufficiently limited in scope such that one of ordinary skill in the art would be able to "at once envisage" the compounds within the scope of the presently recited formula (MPEP 2131.02). The portions of the polymer corresponding to the instantly recited C, D and E groups are not reactive, and therefore remain unchanged in every monomer of the recited formula which is polymerized.

Instant claims 54 and 55 are dependent from claim 53, which recites electron withdrawing group as one of three options for C and E. Claims 54 and 55 are not worded so as to require the presence of an electron withdrawing group. As such, the claims are deemed anticipated by Cote, despite the fact that Cote does not disclose the species of claims 54 and 55. The same reasoning applies to instant claims 62 and 63, which depend from claim 61.

Claim 59 contains product by process limitations. Cote discloses a monomer that appears to be the same as, or an obvious variant of, the product set forth in a product-by-process claim, although it may have been produced by a different process.

Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. See MPEP 2113.

Response to Arguments

Applicant's arguments filed 12/23/09 have been fully considered but they are not persuasive.

Applicant argues that the language of the independent claims excludes the incorporation of other monomers in addition to the claimed monomer, and therefore the instant claims relate to a polyether made from only one type of monomer.

This argument is unpersuasive. As noted previously, the claim language is not limited so as to exclude incorporation of monomers in addition to the claimed monomer. Please refer to the above rejection under 35 USC 112 for further discussion regarding the claim language.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RACHEL KAHN whose telephone number is (571)270-

7346. The examiner can normally be reached on Monday to Friday 8:00 am to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. K./
Examiner, Art Unit 1796

/RANDY GULAKOWSKI/

Supervisory Patent Examiner, Art Unit 1796